The Management of Patent Risk in an Increasingly Open Source-Centric World
A New Global Dynamic Ushered in by Open Source Software

Every Electronic Touch Today is Linux/Open Source Software Enabled
Open Source is Changing the Way We Invent

Software is Rising

Collaborative and Global v. Silo’d & Not Bounded by Borders

Contributor Diversity Drives Inventiveness

Higher Levels of Innovation Result
THE HOW of Open Source Development -
The Linux Foundation & Project-based Collaboration
Co-opetition in Software & Hardware is Embodied in the Open Source Modality - Leading to a New Understanding of Software Patent Filing Strategy

Higher-intensity and Faster-paced **Innovation Cycles** - Invention, Adoption, Augmentation/Contribution and Reuse

Require Leveraging the **Distilled Collective Intelligence of Global Inventors** - Internal Corporate Rethinking of Decisions as to what is Patented v. Opened

Emerging understanding that low in the stack “core” technology is best **opened** and **patent filing** is reserved for high in the stack, **largely application layer functionality**.
The advent of **Co-opetition and Collaborative Development Embodied in Open Source Software Development** DOES NOT signal a demise of intellectual property.

Participation in the new economy of technology development requires that we manage a form of **practiced duality** in terms of IP strategy and that we look to **community solutions for patent risk mitigation**.
Leading Community-Based Patent Non-Aggression Initiatives

openinventionnetwork

AST
ALLIED SECURITY TRUST

RPX
RATIONAL PATENT®

UnifiedPatents

LOTNETWORK®
How have we evolved?

- Established in 2005
- Google Full/Funding Membership in 2013
- Toyota Full/Funding Membership in 2016
The “Linux System” definition comprises core software packages from various open source projects which, taken together, provide the scope of the cross-license obligation to which each community member commits.

A complete and current listing of Linux System packages is available on our website under the Joining OIN tab.
OIN PATENT NON-AGGRESSION COMMUNITY

Global Member Representation

Data is based on OIN's licensee community, which by design comprises global representation of approximately **3,200 companies** from **over 35 countries** to reflect the global reach of Linux and Open Source Software since we were established.
Data is based on OIN’s licensee community, which by design comprises global representation of approximately **3,200 companies** from **over 100 countries** to reflect the global reach of Linux and Open Source Software since we were established.
Global Member Representation - Spotlight China
OIN PATENT NON-AGGRESSION COMMUNITY

2015 - 2020 Growth in Greater China OIN Participation  Chinese Company Participation in OSS Projects During the Period
OIN PATENT NON-AGGRESSION COMMUNITY

Member Representation Sampling

NETWORK/TELECOMM
AT&T  KDDI  Jio  Rakuten  SK telecom  verizon  vodafone

INTERNET
Dropbox  facebook  JD.com  Twitter  YAHOO!

SOFTWARE
Alibaba Group  Microsoft  salesforce  SAP  YOKOGAWA

NETWORKING
CISCO  Juniper Networks  Mellanox Technologies  NETGEAR  SERCOM

AUTOMOTIVE
DAIMLER  Ford  Geely Auto  GM  Honda  Hyundai  Kia  Mazda  Toyota  Volvo  NIO  BYD  SAIC
## Member Representation Sampling

<table>
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<tr>
<th>HARDWARE</th>
<th>Canon</th>
<th>HTC</th>
<th>LG</th>
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<td>Sierra Wireless</td>
<td>YIK</td>
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<td>CNH Industrial</td>
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<td>Pepperl + Fuchs</td>
<td>SolarCity</td>
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THE PATENT NON-AGGRESSION COMMUNITY

The Linux System: Understanding the Scope of Our Cross-License
The Linux System definition contains packages from a broad variety of organizations and groups representing a large share of the body of existing, de-facto standard open source projects.
Almost all packages are basic platform-independent functions of modern computer systems, and are used in a wide variety of devices.

Covers the essential building blocks of today's Linux systems, from embedded computers to mobile phones to cars.
THE PATENT NON-AGGRESSION COMMUNITY

Patent Freedom for Open Source Software Projects

Technical Development & Collaboration Occur in Parallel with Legal Collaboration
Strategic Guardian Role: Licensing into Key Linux / OSS Projects & Tracking Growth
THE PATENT NON-AGGRESSION COMMUNITY

Distilled to Its Essence - OIN Is About Building a Global Community with a Common Set of Values/Norms Around the How One Uses Patents in an Increasingly OSS-Centric World
THE PATENT NON-AGGRESSION COMMUNITY
Joining Open Invention Network

How can you participate?

❖ Everyone can join; Everyone signs the same terms
❖ No barrier to entry; No requirement to hold patents
❖ **Zero** cost for membership
❖ No ongoing time commitment
❖ Everyone makes the same cross-license commitment in the Linux System, as defined on our website
❖ Members and licensees are listed on our website
❖ Join now through our electronic signature process online
THE PATENT NON-AGGRESSION COMMUNITY

Our Role Beyond the License

How Do We Help Our Community Members Against Patent Aggressors?

❖ We **collect and share prior art** to help community members defend themselves.
❖ We **sell patents** to OIN community members for defensive purposes.
❖ We **acquire patents from patent antagonists** asserting Linux-centric patents when this clears patent threats broadly for the OIN community.
❖ We routinely utilize the AIA’s pre-issuance submission program to **limit claim scope of overly broad patent claims** in key technology areas.
THE PATENT NON-AGGRESSION COMMUNITY

Sample Community Benefits

❖ **Threat Clearing:** We acquired 22 patents that were being marketed for sale as reading on “Open Source Software”, thereby clearing this patent threat for its community.

❖ **Patent Sales:** A community member was asserted against by a Fortune 50 company, acquired patents from us and used our patents to negotiate a far better deal than originally demanded.

❖ **Membership Alone as a Deterrent:** Facing a major lawsuit from a Fortune 50 company, another entity decided to join our community. After its membership became known, a settlement was reached within 72 hours on terms that were extremely favorable for them.
THE PATENT NON-AGGRESSION COMMUNITY
Sample Community Benefits

❖ **Prior Art Assistance:** In over 45 cases where one of our members was the subject of claims, we had identified and shared prior art for use against the NPE, or corporate patent aggressors.

❖ **Patent Acquisitions:** We have expended in excess of $15M to purchase Linux-centric patents owned by NPE’s that were being used in active assertions or litigation - 15% of ours circa $100M total patent acquisition investment to date.

❖ **Claim Scope Reduction:** We are among the leading users of the AIA’s pre-issuance submission program, having helped to get more than 25 overly broad patent applications rejected and significantly reducing claim scope in another 40 plus patent applications.
OIN PATENT NON-AGGRESSION COMMUNITY

The Bottom Line

OIN Has Established Patent Non-Aggression as a Cultural Norm in Linux/OSS

Ultimately (i.e., over time), the only companies that do not sign the OIN license and agree to mitigate patent risk in open source code are those that wish to reserve the right to sue on patents that read on core Linux and OSS functionality.
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